TITLE OF INVENTION: DATA MANAGEMENT FOR NETCENTRIC COMPUTING SYSTEMS

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address; COMMISSIONER FOR PATENTS

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NOTICE OF ALLOWANCE AND FEE(S) DUE

33391 7590 04/30/2008

ACCENTURE INDY 33391 BRINKS HOFER GILSON & LIONE ONE INDIANA SQUARE, SUITE 1600 INDIANAPOLIS, IN 46204 EXAMINER

CORRIELUS, JEAN M

ART UNIT PAPER NUMBER

DATE MAILED: 04/30/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,134	09/29/2000	Stanton J. Taylor	10022/039	1622

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FREE DUE
 PUBLICATION FREE DUE
 PREV. PAID ISSUE FREE
 TOTAL FEE(S) DUE
 DATE DUE

 nongrovisjonal
 NO
 \$1440
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 07/30/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or tran ig the I ierwise	smitting the ISSU Patent, advance or in Block 1, by (a							
CURRENT CORRESPONDENCE ADDRESS (Nose; Use Block 1 for any change of address)				F	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying pagers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
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ACCENTURE INDY 33391 BRINKS HOFER GILSON & LIONE ONE INDIANA SQUARE, SUITE 1600				I S a u	I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.					
INDIANAPOLIS	S, IN 46204			ſ					(Depositor's m	ime)
									(Signa	ture)
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APPLICATION NO.	FILING DATE			FIRST NAMED INVENT	OR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	П
09/677,134	09/29/2000			Stanton J. Taylor				10022/039	1622	_
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EXAM	INER		ART UNIT	CLASS-SUBCLASS						
CORRIELU	S, JEAN M		2162	707-010000	_					
1. Change of corresponde	nce address or indicatio	n of "Fe	e Address" (37	2. For printing on th	ne pate	nt front page, lis	t			_
CFR 1.363). Change of correspondence address (or Change of Correspondence)			Correspondence	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,						
Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.				(2) the name of a single firm (having as a member a 2						
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			of a Customer	registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is 1 steel, no name will be printed.						
3. ASSIGNEE NAME A										
PLEASE NOTE: Unle recordation as set forth	ess an assignee is ident 1 in 37 CFR 3.11. Comp	ified be detion o	low, no assignee of this form is NO	data will appear on the \(\text{a substitute for filing} \)	e pater an ass	nt. If an assign ignment.	e is ic	lentified below, the de	ocument has been filed	for
(A) NAME OF ASSIG				(B) RESIDENCE: (CI						
Please check the appropri	ate assignee category or	catego	ries (will not be pr	inted on the patent):	□ In	idividual 🗖 Co	rporati	on or other private gro	up entity 🔲 Governn	nent
4a. The following fee(s) a	are submitted:		48	. Payment of Fee(s): (F		first reapply an	y prev	iously paid issue fee	shown above)	
Issue Fee			0	A check is enclose		F PEO 2020				
				☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any						
				overpayment, to De	eposit	Account Number	Ť	(enclose a	extra copy of this form	n).
 Change in Entity Stat a. Applicant claims 	us (from status indicated SMALL ENTITY state			☐ b. Applicant is no l	longer	claiming SMAI	L EN	UTY status. See 37 CI	R 1.27(g)(2).	
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if requeords of the United Sta	uired) v tes Pate	vill not be accepted ent and Trademark							y in
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ACCENTURE	INDY 33	CORRIELUS, JEAN M			
BRINKS HOFEI			ART UNIT	PAPER NUMBER	
ONE INDIANA INDIANAPOLIS			2162		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 807 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 807 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)					
09/677,134	TAYLOR, STANTON J.					
Examiner	Art Unit					
Jean M. Corrielus	2162					

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. X This communication is responsive to the amendmend filed on April 10, 2008.
- 2. The allowed claim(s) is/are 1, 2, 10, 14-18, 23, 25, 27-33, and 35-48 renumbered as 1-31.
- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. \(\sum \) Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - The reto or 2) to Paper No./Mail Date ____.

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 - Paper No./Mail Date _____.

 Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of
- each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 04/10/08
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date ______.
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

/Jean M Corrielus/ Primary Examiner, Art Unit 2162

DETAILED ACTION

 This office action is in Request for Continued Examination filed on April 10, 2008, in which claims 1, 2, 10, 14-18, 23, 25, 27-33 and 35-48 presented for further examiner.

INFORMATION DISCLOSURE STATEMENT

The information disclosure statement (IDS) filed on April 10, 2008 complies with the
provisions of M.P.E.P 609. It has been placed in the application file. The information referred to
therein has been considered as to the merits.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Sanders N. Hillis (Reg. No. 45,712) on November 7, 2007.

The application has been amended as follows:

In the claim:

25. (Currently Amended) The method of claim 24 23 wherein the segmentation parameters comprise an origin, of the majority of the data requests.

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27. (Currently Amended) The method of claim 26 23 wherein the segmentation parameters comprise determination of a plurality of related subject matter areas.

Allowable Subject Matter

4. The present application has been thoroughly reviewed. Upon searching a variety of databases, the examiner respectfully submits that claims 1, 2, 10, 14-18, 23, 25, 27-33 and 35-48 are allowable in light of the terminal disclaimer and in light of the prior art made of record.

Reason For Indicating Allowable subject Matter

5. The following is an examiner's Statement of Reasons for Allowance: The present invention is directed to a distributed data in a netcentric computing system that requires some form of distribution strategy to allow efficient and cost effective operation, wherein the distribution strategies is described as a segmented data distribution system and a replicated data distribution system. Segmentation and replication strategies are used individually or together to fulfill the business requirements. In general, data replication produces data that is replicated from data stored in a central database, whereas, data segmentation produces data that is partitioned into segments, that together represent a total data present in the netcentric computing system. The combined use of data replication and data segmentation produces selectively distributed data, which is a predetermined portion of the data that is produced by segmenting the central database and then replicating the segmented portion of the central database for storage in one or more locations, wherein segmentation is a process of dividing the data for the netcentric computing system into multiple pieces, or segments. The segmentation strategy can be horizontal segmentation and vertical segmentation or a combination of both. The vertical segmentation

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strategy is storing related subject matter areas on different database servers, wherein these segments are often viewed as subject database, since they are located together based on the type of data contained therein, not segmentation key or similar master identifier and uses in breaking up a large database into smaller subject areas, whereas a horizontal segmentation strategy vertical segmentation strategy reflects the natural way to partition data that is in line with the way the applications of the enterprise structure their transactions and uses a segmentation key to uniquely identify records in the central database and provide superior solution when the data access model is consistent for the various applications and locations. The closest prior art, Meisl et al., (article entitled, "Parallel synthetic aperture radar processing on workstation"), however, is directed to a similar system for obtaining high resolution images of the earth's surface using a combination of vertical and horizontal partitioning SAR processing strategies in the synthetic Aperture radar signal processing. A vertical partitioning processing is partitioned vertically through the use of pipelining, where the throughput of the processor increases without increasing its latency (see fig.5), whereas, horizontal partitioning divides the data set among the processors, wherein each processor performs essentially identical operations on subsets of the data (see fig.6). However, Meisl either singularly or in combination, fail to anticipate or render obvious the recited features "database located within each of the data stores, wherein the databases in each of the data stores are representative of a segment of data in the netcentric computing system, and wherein the data is horizontally segmented with a segmentation key and also vertically segmented to form the segment of data included in each of the databases, wherein the segmentation key is operable to uniquely define records across the database in each of the data stores". These features, in conjunction with all other limitations of the dependents and

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independent claims render claims 1, 2, 10, 14-18, 23, 25, 27-33 and 35-48 allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032.
 The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean M Corrielus/ Primary Examiner, Art Unit 2162

April 30, 2008